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With Dr. Dunlop's
Comments


A

LETTER ON VACCINATION

AND

THE VACCINATION (SCOTLAND) ACT.

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BY

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ALLOPATHY AND VACCINATION.

IN the last number of your Magazine (November, 1864) a letter with the above title is published, in which opinions are expressed unfavourable not only to the practice of medicine generally, but also to what is of far more consequence, the practice of vaccination. Had the paper appeared elsewhere than in your Journal, I should not have troubled you with any review of its contents. But finding its way, as it must do through your columns, amongst those who have the direction of our public vaccination, and being characterised by a boldness of tone in itself enough to produce an influence upon the reader apart from its subject-matter, it is of consequence that the doctrines it expresses should not be permitted to pass unchallenged.

Since the introduction of vaccination by Jenner, the public mind has, by an educational process more or less steady, been brought to a full conviction of the great value to mankind of the discovery as an antidote to small-pox. The early promoters of vaccination had much to contend with at the outset of their labours. The weight of prejudice, and the stronger influence of theorizers powerful in argument, had to be overcome. The supporters of the new doctrine had not the accumulated evidence to advance which to-day might be arrayed on its side; they had to sustain their cause by appeals to experiments going on around them, limited in number and imperfectly developed. But they had the dread ailment itself spreading its devastation on every hand,—sparing only the charmed circle among whom vaccination had been received, and this did more to inspire confidence in vaccination than all else besides. Men whose judgment could not be swayed by reasoning were forced by their fears to seek refuge in the new discovery, and so a belief in the efficacy of vaccination to ward off small-pox gained ground. As time progressed, and vaccination became general, small-pox proportionally decreased, and the doubts which fears had allayed again rose to the surface. Thus from time to time the medical world has been agitated with questions as to the probability of vaccine lymph giving rise to other diseases. Absolute unanimity of opinion upon such a point among men whose differences have passed into a proverb can hardly be looked for. Yet, I venture to affirm that there is no great question

involving matter of speculation canvassed among medical authorities upon which so much concurrent belief exists than this one. The view held being, that while the vaccine virus is an antidote to small-pox, it is not the vehicle of other diseases. But it is not to be expected that the simple enunciation of this will suffice, or that men will be content to believe in a great good, if it is possible to be sceptical on the point. The doubt will be reiterated with more or less argument and with lessening hesitation too, now that small-pox has ceased to be a terror; and when the doubt is raised, and gets some currency, as now through your columns it has done, it must, as before be opposed by its antidote.

In dealing with the objections of your correspondent a difficulty presents itself at the very outset,—a difficulty occasioned by the manner in which he puts his case. There is no systematic argument—no reference to facts nor to authorities, save one or two loose allusions to the names of individuals unknown to fame, and to their opinions without reference to the writings where they occur, and much strong language of his own expressive of his total unbelief in any good thing coming out of vaccination. It will therefore be impossible to follow him in detail according to any system, and in what follows I shall rather seek to classify the objections which are current against vaccination under two comprehensive heads, and in replying to them, state briefly some of the leading reasons why medical men and the legislature desire to make the practice of vaccination universal.

Before proceeding to do so, however, it may be proper to justify the remarks I have made with respect to your correspondent's contribution.

Drs. Johnston and Martin are referred to as authorities, but who these men are, and what their writings, there is nothing to show. Dr. Martin, it appears, has witnessed distressing results after what was called "healthy matter" was used; but what these results were he does not explain—neither does he tell us whether the thing that was called healthy matter was vaccine virus at all or not. The "*Lancet*" is quoted to the effect, that "out of 800 patients admitted into the Small-pox Hospital in London in one year, considerably more than two-thirds had been previously vaccinated," as if vaccination was blameworthy because of this. In a very short time it will be found that *all* who are so admitted will have been previously vaccinated. But that will merely prove that vaccination is more general than of yore, and that occasionally, whether from imperfect vaccination or the lapse of years, the protection it afforded has not been absolute. Drs. Barthez and Rillet have somewhere written, it is also said, "that in 208 children (who died, I presume) that had been vaccinated, 138 died of tubercular consumption, and in 95 unvaccinated 38 only died of the same disease;" and the unavoidable conclusion drawn from that is, that mortality from tubercular consumption has increased most alarmingly by vaccination. The remaining 57 of the 98, for aught he tells us, may have died of small-pox, and of course could not have fallen victims to any other disease, and the unavoidable conclusion rather is, that vaccination, while it saves from small-pox, does not do so from any other ailment.

I shall not prosecute this detailed criticism further, but proceed to state, and to reply to the objections to vaccination in the manner already indicated.

The objections to the practice of vaccination may be stated thus:—1.

Vaccination has done more harm than good, in so far as, while it may have in some instances protected persons from the ravages of small-pox, it is not an absolute security from this ailment, and it has increased the mortality from other diseases, such as consumption and scrofula, and deteriorated the constitutions of the people of the present day. 2. That diseases of the skin, scrofula, and venereal disease may be communicated to a healthy child through the medium of the vaccine virus.

To the objection under the first mentioned head, that vaccination is not an absolute security from small-pox, it must be admitted that, as at present practised, vaccination does not give absolute security, but it cannot be denied that it has lessened the mortality from small-pox in a degree so great, that in countries which, in its periodical visitation, it decimated, it is now regarded as a comparatively harmless visitant; and from being the foremost death-producing disease among epidemics, it is now the least, wherever vaccination is practised; while it still reigns a terrible malady among new tribes and races who are unprotected;—and this, for the present, is all that its advocates contend for. The fact that it is not an absolute security from the ailment stimulates inquiry as to the cause of this. Imperfect vaccination may arise from non-susceptibility at the time of application, from unripe virus, or virus imperfectly applied, or the ailment of small pox may have a degree of contagious virulence which some susceptible individuals, though vaccinated, cannot withstand, and these are all points for medical inquiry, and are receiving attention.

With respect to the allegation that mortality from other diseases has been increased by vaccination, an important consideration requires to be kept in view. Vaccination having removed a great death-producing cause, gives greater scope to other diseases. The condition or state in an individual who takes fever, or diphtheria, or measles, is something definite and distinct. The poison of measles will not give rise to scarlet fever nor to hooping cough. Vaccination which effects some definite change in the state of an individual, by which his system is rendered insusceptible of small-pox, will not in virtue of this change be equally proof against fever or cholera. The fifty or a hundred children who were vaccinated to-day will be as liable to all the ailments incidental to infantile life as though they had not been vaccinated. Efficient vaccination only spares the vaccinated from death by small-pox, to die some time of something else, for all must die, and in consequence, the deaths will be attributed, not to small-pox, but to the croups, the hooping-coughs, the injuries, and to all the other causes of death of which we read. We should therefore expect to find mortality from other diseases increased since vaccination was introduced, without laying blame upon it. Thousands upon thousands, who before would have died from small-pox, are spared by vaccination to die of some other disease. To say that consumption, or heart disease, or fever, is more fatal since vaccination was introduced, might be, and really is, another form of expressing the fact that fewer people die from small-pox since the practice of vaccination became general. For if it be the case, as I shall show it is, that the general death rate from all diseases has not increased but diminished since that time, it must follow that vaccination has not made matters worse, but better, unless it can be shown that some other great cause, of which we have never heard, has been at work to remedy the ills produced by vaccination.

In support of the proposition that mortality, general or special, has not been increased by or since the introduction of vaccination, I submit the following evidence taken,—1st, From the general death rates; 2d, From the death rates of special diseases, such as consumption and scrofula.

I. GENERAL DEATH RATES.

* Dr. Greenhow, lecturer on public health at St. Thomas's Hospital, has made a careful examination of the bills of mortality of London. Taking two periods of ten years each, one from December, 1680, to December, 1690—before the introduction of vaccination—and another from 1846 to 1855 inclusive—after its introduction—he found that in the first period out of every 10,000 living, there annually died from all causes 421 persons. In the second period, when vaccination should have been exerting its deteriorating powers to the full extent, according to the opinion of objectors, the average annual death rate per 10,000 amounted only to 249, a saving of life upon a population such as that of our own city equal to 6,880 persons in a year.

† Dr. Farr has given a more extensive comparison of the average annual death rate in London, from which we extract the following:—

Average Annual Death Rates in London, from all Causes and at all Ages.	
Date.	Per 10,000 living.
1629-35	500
1660-79	800
1728-57	520
1771-80	500
1801-10	292
1831- 5	320
1840-54	248 9-10 ths.

In the first period it will be observed that the annual death rate was double, and the second three and a-half times greater than it was in the fourteen years between 1840 and 1854.

* On the Death Rates of London in the 17th, 18th, and 19th centuries. Published in Parliamentary Papers, 1855.

† M'Culloch's Descriptive and Statistical Account of the British Empire.

* Other examples might be given from other countries than our own, but one from Sweden, which is a well vaccinated country, will suffice.

Average Annual Death Rate in Sweden, from all Causes and at all Ages.	
Date.	Per 10,000 living.
1755-75	289
1776-95	268
1821-40	233
1841-50	205

Here again, it will be observed, that while in the middle of the 18th century, the annual death rate was 289 per 10,000 living; in the middle of the 19th the numbers were 205, or 25 per cent. lower than they were before vaccination was introduced.

So much for the general death rates. I will turn now to the second part of the evidence, viz., the evidence against the increased mortality of special diseases—such as consumption or pulmonary disease—scrofula, &c.

Annual Death Rate in London from Scrofula.	
Date.	Per 100,000.
1681-90	801
1746-55	1099
1846-55	206

It will be observed, from the annexed Table, that of 100,000 living in 1681-90, the death rate from scrofula was 801. In 1746-55 it was 1099, while between 1846-55 it was only 206, so that before vaccination scrofula was five times more fatal than it was ten years ago—after vaccination was introduced.

* Simon's Report to the Board of Health.

Of the pulmonary death rate, statistics afford equally valuable evidence. From them we learn that deaths from disease of the lungs were seven times more numerous in the 18th century than they are in the 19th.

Dr. Farr, in the work already quoted, says, in speaking of the above statistics, "that the proportion of persons destroyed by consumption or other forms of scrofula has progressively declined in London since the introduction of vaccination." Dr. Simon, medical officer of the existing Board of Health, writing of the comparative liability of vaccinated and non-vaccinated individuals to diseases generally, states that "there has never been adduced a tittle of evidence to show that vaccinated persons suffer more than non-vaccinated from any ailment whatever. On the contrary, when such inquiries have been made, they have distinctly refuted the supposition."

Proofs similar to the above, may be readily obtained from the statistics of other countries, but further evidence is not needed to support the proposition for which I contend, that vaccination has been productive of much good. The ravages of small-pox have under its influence been greatly diminished, while no prejudicial results have followed upon its introduction, as is clearly demonstrated by the diminished general death rates of recent years, and the lessened occurrence of deaths from those special ailments which it is sometimes said to have aggravated.

II. Objection. That diseases of the skin, scrofula, and venereal disease may be communicated through the vaccine lymph to a healthy child.

This objection, if well founded, would be a serious one indeed.

It is one frequently raised, and one demanding most serious attention. In dealing with it, it will be necessary to keep in mind several important considerations. Vaccination in this country is usually performed about the twelfth week of infantile life. Up till this period, in the great majority of cases, the infant may have thriven well, and vaccination may be the first little ailment to which it has been subjected. After the vaccination has been complete, the infant begins to pass through the most trying period of its existence. The process of teething is one not free of danger even in the healthy, well attended-to child. How often do we find children, before they have completed the cutting even of their eye-teeth, losing their flesh, becoming pale and flabby, afflicted with diarrhœa perhaps, or what is far more alarming, with serious convulsions, which may end in death. Besides these symptoms, there are others which usually accompany teething. We often find children with skin diseases, which appear always to be getting worse, the nearer the teeth are to the surface of the gum, and when the teeth are fairly through, and the irritation set up by them has subsided, the disease disappears, leaving no trace behind.

The disease most commonly attendant upon dentition, is that one known by the name of *eczema*. Most people are familiar with it. It consists of little watery itchy pimples, which appear on the face, on the head, and various other parts of the body. It is this form of skin disease which vaccination is said to communicate. In addition to this disease, we have as an attendant upon teething, glandular swellings, which inflame, come to a head, and often break, leaving a scar behind. We more frequently find such glandular swellings near the teeth which are cutting, than in any other situation.

It need not therefore be a matter of surprise, that people should be

found blaming vaccination for the production of these ailments. It is done through ignorance. They forget that teething with all its attendant evils, is common to all children, whether they are vaccinated or not, rich or poor. That these skin diseases and glandular swellings often times are present weeks before the period for vaccination arrives, and that the presence of these swellings and eruptions, forms an objection to the child being vaccinated. Before vaccination was discovered, children were quite as liable to skin diseases as they are at present, and in later days "inoculation" had to bear the onus of producing them. But long before even inoculation was heard of, from the earliest days of medicine, children teethed, skin eruptions and glandular swellings prevailed.* So early as 1714, a writer upon skin diseases, says—"Among diseases of infants and young children, scarce any attends more frequently than seabby eruption in several parts of their bodies, as in the breech, but more especially their foreheads, brows, and other parts of the face which we often find overrun with dry and seabby crusts." Keeping in view these misconceptions, and the *propter quia post fallacy* which they illustrate, we proceed to discuss the objection itself.

The term "serophulous" admits of a double interpretation. In one sense its application is limited to those chronic long coming-to-a-head-gatherings of matter, which must be familiar to those of your readers, who have to do with the poor, the ill fed and the ill clad. Their presence is to be accepted as an index of bodily depression. In the other Scrofula is held to be synonymous with Consumption and other tubercular affections. It is an hereditary disease. It is needless to say it may descend from parent to child. Some causes may accelerate its progress, others may retard its way to the surface. But the root of the disease is low down, deep in the constitution. It is a part of the machine. In the early development of the body it was there. In the formation of the bones, of the muscles, of the fat, it had a share. It belongs to the family quite as much as the form of the face, the colour of the hair, or the length of the nose.

Scrofula, in neither of these two senses can be communicated, as Dr. Simon says:—"They who mean that vaccination propagates from one person to another, serofulous disease in the second sense above referred to, might as well say that it communicates a roman nose or a landed estate." Scrofula, glandular swellings, or skin diseases, cannot be communicated in this way. It is physically impossible. It has never yet been done. Experiments have been tried without success. The discharges from running sores, serofulous sores, the watery fluid from the seabby face of an infant, have been introduced into a healthy child, without producing any result. No scrofula appeared. No skin disease. It is an admitted fact by all medical practitioners of any note in England, in France, all over the world, that such diseases cannot be communicated by contagion. "If such communication of scrofula were possible, we would have had long ere this a universal infection."†

Admitting that these diseases are not communicated from child to child through the vaccine virus, can the same be said with equal certainty

* Dr. Turner on diseases of the skin.

† Dr. Heim, of Vienna.

of venereal diseases, some of the products of which are capable of being communicated by contagion. This is a much more serious question than the other. It is not, however, the less difficult to answer, for the subject has received great attention from such men as Simon, Marson, Acton, and Lee, in this country, and Ricord, the highest living authority on venereal disease, and Taupin in France, Sigmund, Hebra, and Friedinger in Vienna.

The form of venereal disease which is said to be capable of being transmitted from an infected child to one that is healthy, through the medium of vaccination, is called syphilis—infantile syphilis. A child may be born of parents, either of whom or both may have had the disease, and present at birth all the appearances of a fine healthy infant, plump, fat, and well coloured. It may continue in this condition for two or three months. About the twelfth week the infant is vaccinated. The vesicle runs a proper course, on the eighth day it is pronounced a “beautiful pock.” By the end of four weeks the scab has come off, leaving a fine scar or cicatrix behind. Immediately thereafter a series of phenomena begin to show themselves. An eruption appears upon the body, back, and legs of the infant. Around the lower part of the gut, are small circular patches of discoloration, supposed to be piles. The skin loses its fine silky feel, and becomes tough and copper coloured, like chamois leather. The infant snuffles in its breathing, and appears to have its nose always stuffed, dwindles, and unless under great care, and even with it, will probably die. The infant has syphilis. How did the disease get into its system? Where did the poison come from? The mother says the child was born *clean*. It had nothing wrong with it till it was vaccinated. After that everything went wrong. It was bad matter in the vaccination, and the doctor was to blame. This is the *post hoc propter hoc* argument. But neither the matter nor the doctor was to blame—the opprobrium lay rather with the parent. The disease had been in the infant at birth, and had lain dormant for two or three months. It seldom does so longer than this—often not so long. At length it broke out, and showed itself in its full virulence. What had vaccination to do with it. Very little indeed. The utmost that may be said of it, is that it did not retard the appearance of the disease. During the last few years I have had opportunities of hearing over and over again objections like the above, and, in addition, have seen and carefully examined the children so infected. In no single instance have I been able to trace the disease to the vaccine lymph, and in no single instance have I failed to trace the disease in the infant, to its proper source, namely, the parent.

Numerous experiments have been made, with the view of solving this question of the communicability of syphilis and other contagious diseases through the vaccine lymph, some of which I shall shortly narrate, resting satisfied that the conclusions deduced from them will be complete and convincing. * M. Taupins, medical officer of the Hospital for Sick Children in Paris, made experiments on a large scale, from the report of which I quote the following passages:—“Il a pu observer que le vaccin

* Simon's Parliamentary Papers.

recueilli chez des enfants atteints de maladies aiguës ou chroniques, de fièvres essentielles, affection typhoïde, fièvres éruptives, &c. &c., était tout aussi actif que s'il eût été emprunté à des enfants bien portants; qu'il donnait lieu à une vaccine tout aussi abondante et régulière, et qui preservait tout aussi efficacement de la variole; et ce qu'il n'importait pas moins d'établir par un nombre considérable d'observations, c'est que le virus ne transmettait aucune maladie, soit aiguë, soit chronique, contagieuse ou non contagieuse. Un grand nombre d'enfants atteints de gale, de scarlatine, de rougeole, de varicelle, de varioloïde et de variole, ont fourni un vaccin qui n'a jamais communiqué aucune de ces maladies contagieuses. Il en a été de même pour le vaccin pris sur des sujets atteints de rachitis, de scrofules, de syphilis, de tubercules, d'éruptions chroniques du cuir chevelu, de dartres, &c. Dans aucun cas nous y insistons à dessein, le virus n'a rien communiqué que la vaccine toute seule. Loin de nous l'idée de conclure de cette innocuité qu'on doive employer indifféremment du vaccin pris sur des sujets sains ou malades; mais nous voulions rapporter ces faits bien avérés pour faire justice de ce préjugé qui attribue à du vaccin malsain les maladies qui surviennent quelquefois chez les sujets vaccinés, longtemps même après l'inoculation."

To the above experiments Professor Sigmund of Vienna added the following, which was frequently repeated, and always with the same result. The discharge of a chancre or primary sore, the only form of syphilis usually admitted to be capable of being communicated by contagion, was mixed with vaccine lymph, and inserted with a lancet into a child's arm. After the usual number of days had passed, the skin at the point of insertion of the "matter" became the site of an ordinary primary syphilitic sore, but there was no vaccine vesicle. In the child's arm there was no combination of "pock and chancre." It must be borne in mind, besides, that the form of disease which we find in infants is not that of primary sore or chancre,—it is that of secondaries, *i.e.* skin eruptions, and condylomata or "supposed piles,"—forms which, says *Acton, a very high authority on syphilis, in spite of all our numerous experiments, we have never succeeded in producing by inoculation.

†Paget, in writing on the same subject, says "that the blood of an infant suffering from syphilitic disease is not capable of directly conveying to another the poison; and that a well formed vaccine vesicle is a certain proof of a pure and unmixed vaccine lymph, by the insertion of which into a healthy child no other disease or taint or impurity can by possibility be conveyed.

One more example, and I shall conclude this portion of the subject.

West, Physician to the Children's Hospital, London, and author of the standard work on Diseases of Children, says,—“There has never come under my notice an instance in which there seemed the slightest pretext for supposing that syphilis had been communicated to infants through the medium of the vaccine lymph.”

We have thus disposed of the question of the communicability of disease to a healthy individual through the medium of the vaccine lymph.

* Acton on Syphilis and Prostitution.

† Paget's Pathology: Lecturer in St. Thomas's Hospital, London.

The great question of the efficacy of vaccination in arresting the spread of small-pox and preserving communities from its invasion, engaged for many years the attention of thinking men, long before they ventured to suggest imperial interference to compel the use of the remedy so wonderfully provided. The right of interference in a matter so strictly personal to individuals is naturally liable to be resented, or at least called in question. Why a parental government should insist that each member of its community should have introduced into his circulation, a virus which is to set up some constitutional disturbance, and prevent the individual from contracting a disease for which possibly he may have rather a liking than otherwise, does seem hard upon the liberty of the subject; but when we reflect that the taste for such disease, if it exist, can only be indulged at the imminent peril of every member of the community in his vicinity, and when we reflect further, that the disease, suffered to have its full sway, is certain to produce local burdens, by removing by death the heads of families and of households, the question ceases to be worthy of a moment's controversy. Legislative enactment on this subject was not hastily proceeded with, in our own country, although the discovery of vaccination belonged to ourselves. Foreign nations were foremost in applying its benefits, and when our own Government seriously took up the duty of legislation on the subject, these countries were resorted to, for the exact evidence to support the Government procedure. I shall not reiterate statements which have already appeared years ago at considerable length in your Journal,* to show the overwhelming evidence that sustained the Government in its actings. While the evidence would have justified compulsory vaccination throughout the country, the steps taken were most cautious and guarded.

Previous to 1840 the Government encouraged vaccination by subsidising the National Vaccine Institution. In that year it advanced a step further, and authorised throughout England and Wales that vaccination might be claimed by every one at public cost, leaving it optional with individuals to use the right or not. In 1853, after a lapse of thirteen years, a law was passed making vaccination compulsory in England and Wales,—the experience of the previous years going to strengthen the evidence otherwise obtained. The Act of 1853 had with it some of the timidity which had delayed for so many years the compulsory feature. It provided no machinery for enforcing the law, and became in consequence partially inoperative. To remedy this defect, the Privy Council in 1859 promulgated an order, under which a systematic inspection, especially in unions throughout England, was arranged, and public instructors for vaccination provided.

It is interesting to remark the results which followed upon these enactments, and to contrast them with others occurring elsewhere. Dr. Aitken, in his recent work,† referring to the period of voluntary vaccination, previous to the compulsory enactments, has the following. "The deaths from all causes being 1,000. The deaths from small-pox was as follows:—"

* "Poor Law Magazine," February, 1860.

† Dr. Aitken's *Science and Practice of Medicine*, 1863.

London,.....16	Perth,.....25	Galloway, ...35
Birmingham,.....16·6	Paisley,18	Limerick, ...41
Leeds,17·5	Edinburgh, ...19·4	Dublin,25·6
England and Wales, 21·9	Glasgow,36	Connaught, 60

“In other countries where vaccination has been more or less compulsory the deaths from all causes being 1,000, the deaths from small-pox were as follows:”—

Westphalia,.....6	Pomerania,5·25	Lombardy, ...2
Saxony,8·33	Lower Austria, 6	Venice,2·2
Rhenish Provinces, ...3·7	Bohemia,2	Sweden,2·7

From these figures it appears that deaths from small-pox, in our own country, under the voluntary system were comparatively infrequent, but were strikingly more numerous in our own city, and in districts in Ireland, where vaccination had been less extensively practised than in England, where it was more common. But while the mortality from small-pox in our own country was thus comparatively limited, it was large when contrasted with those continental districts, where vaccination had been more general.

That it was to vaccination that the difference in the death-rate is attributable, is demonstrated by a series of observations (also quoted by the same authority) made upon our own army and navy, where every soldier or sailor is protected by vaccination, if he has not previously suffered from cow-pox or small-pox. “For twenty years, namely from 1817 to 1836, inclusive, it appears that in the dragoon regiments and guards, with an aggregate strength during that period of 44,611 men, and a total mortality of 627, only 3 deaths were from small-pox.”

“Among the troops at Gibraltar, the aggregate strength being also 44,611 men during that period, and a total mortality of 1,291, only a single death occurred from that disease. In the West Indies several epidemics of small-pox prevailed during the period, but there were no deaths from that disease, although the aggregate strength of the troops was 86,661, and with a total mortality of 6,803.

“Among the black troops on the same station, with an aggregate strength of 40,934, and a mortality of 1,645, there was not one case of small-pox.”

“At Bermuda, Nova Scotia, New Brunswick, and the Cape of Good Hope, not a death from small-pox occurred during the twenty years mentioned; and the white troops of Western Africa wholly escaped this disease, while the black unprotected population were dying by hundreds. In Malta, from 1818 to 1838 inclusive, the aggregate strength of the British troops being 40,826 during these twenty years, and the total mortality 665, only 2 deaths were from small-pox.”

These results need no comment, and would of themselves justify the extension of the enactment first enforced in England to the whole of Great Britain.

The Compulsory Vaccination Act for Scotland bears date 28th July, 1863. Previous to that time the government encouraged vaccination throughout Scotland when giving to parishes the grant in aid of medical relief. The parishes accepting the Parliamentary grant being laid under an obligation to vaccinate by their medical officer all applicants, without

demanding a fee or other remuneration, and without the same being regarded as parochial relief.

When the Act of 1863 was framed, a *similar* arrangement seems to have been contemplated,—the service being performed by a public vaccinator. The Act provides for the remuneration of the vaccinator out of the assessment levied for the relief of the poor; directs that the vaccination and medical treatment shall not be regarded as parochial relief; and provides for the appointment in certain districts of the country, of a travelling vaccinator. It also makes provision for a visitation of individuals who are reported by the registrars to have neglected vaccination, and for the compulsory vaccination of such; but strange to say, it entirely omits to direct that all applicants for vaccination shall be freely vaccinated. This anomaly has resulted most unfortunately for the working classes. With all its high-toned provision to prevent the pauperising of the vaccinated, free vaccination under the Act has come to be administered only to paupers, the condition attached to the “Grant in aid” having been rescinded by the Board of Supervision, as soon as the Act came into force. We are thus left at this moment in a worse position for obtaining vaccination under an Act passed with the express object of extending and making “further provision for the vaccination of the poor” than we were before it came into existence: the Act at once making it penal to neglect the vaccination admittedly necessary for the public weal, and failing to provide it for the individuals intended to be benefited by it. This is much to be deplored, as the working classes who form the larger portion of our population, should have had the fullest facilities given them for obtaining vaccination free of charge. Oddly enough, there is a bye-way by which non pauper poor may obtain free vaccination from the public vaccinator, but it is by the extraordinary course of neglecting to comply with the Act. An individual has only to pay no attention to the notifications of registrars, and to neglect vaccination for six months, when, by an expensive method for the community, he will be visited by the public vaccinator, and vaccinated free of charge, *under a penalty of twenty shillings if he refuses then to allow such operation.*

One cannot understand how such a manifest oversight can have been permitted in the preparation of the Act. But although the Act has not, in so many words, directed that every one who seeks vaccination at the hands of the public vaccinator, shall have it performed free; it is so obviously intended that it should be so, that we are at a loss to know why the Board of Supervision, with whom it rests to direct its administration, should not have contrived to give effect to the purpose of the legislature.

In directing—as they have done—that paupers, and such individuals as are reported to have, for six months, neglected vaccination, shall alone be vaccinated at public cost; they defeat one of the chief purposes of the enactment, and practically nullify important sections of it. And by making the operation costly to the poor, they raise up a barrier to the observance of the statute, and so render it distasteful to those among whom a more liberal policy might have made it popular. Possibly some overruling cause, which we cannot divine, limits the action of the Board in this matter; but seeing they had the power and exercised it before, of making parishes accepting the Parliamentary grant, provide

free vaccination for all comers, and our local parishes continue to receive that grant; the Board surely possess the means in connection with the grant, if they have it not under the Act, to continue to the poor the privilege they before enjoyed.

If the fee which the Act authorises the vaccinator to claim from the parish, for every person he vaccinates, be the stumbling-block, and it be incompetent for the Board to compound with the vaccinator for his services to the general public, and so to put a reasonable limit upon his emoluments, as they did upon those of the medical officers of the parishes, for like services previous to the passing of the Act; surely the matter can be remedied by directing these medical officers to resume the duty which they were suffered to abandon when the Act came into operation.

In whatever way it may be brought about, I trust the Board will soon re-consider the decision they have come to, and remove the restriction which has by their direction been put upon the vaccination of the poor.

There is another matter which deters to some extent the working classes from compliance with the Act, and goes to swell the numbers of individuals, who, neglecting vaccination for their children for six months, are, by the expensive process already mentioned, in the end vaccinated at public cost, I mean the practice which prevails to a considerable extent among local registrars of inducing parents for a fee of sevenpence to take a vaccination certificate at their hands. The pretence under which this proceeding is justified, is that it is a provision of the statute, that registrars shall issue such certificate on payment of a fee. But the statute does not contemplate the issue of such certificate at the time of registration, and in all cases, however convenient it may be for registrars, intent on fees, to make it appear so. The section of the Act referring to the matter, is as follows. "The register books shall be open for search at all reasonable times, and the registrar shall be obliged to give a copy certified under his hand of each entry therein, on payment of a fee of one shilling for each search, and sixpence for each certificate." The purpose which this clause is obviously meant to serve, is to provide a means of obtaining proof of registration in such exceptional cases as may occur in the community, when for some specific object the evidence from the registers may be required. An attempt to induce illiterate parents to take certificates for the sake of the paltry fee, cannot be too deeply reprobated, and I trust will not escape the censure of those in authority.

With these obstacles to the working of the Act removed, and the utmost facility given for vaccination free of charge, and the operation itself performed skilfully, a due regard being had to the condition of body of the patient and the purity and ripeness of the matter introduced, the community must soon come to view the coercive legislation to which the government has resorted, as one of the greatest blessings which the legislature can bestow upon the people.

